

CLAIMS:

1. A method for performing an address update in a communication system, the method comprising the steps of:

- indicating that an address update process needs to be performed, wherein location-related information about a mobile node is transmitted to a correspondent node of the mobile node if the address update process is performed;

- in response to the indicating step, authenticating the correspondent node, the authenticating step yielding identity information about the correspondent node;

- based on the identity information, determining whether the address update process is to be carried out; and

- performing the address update process when the determining step indicates that the address update process is to be carried out and omitting the address update process when the determining step indicates that the address update process is not to be carried out.

2. A method according to claim 1, wherein the performing step performs the address update for optimizing routing between the mobile node and the correspondent node.

3. A method according to claim 1, further comprising a step of storing security policy data in the mobile node, the security policy data indicating a set of trusted parties.

4. A method according to claim 3, wherein the determining step comprises comparing the identity information with the security policy data stored in the mobile node.

5. A method according to claim 4, wherein the performing step is carried out in response to the comparing step when the comparing step indicates that the correspondent node belongs to the set of trusted parties.

6. A method according to claim 4, wherein the determining step comprises prompting a user of the mobile node to make a decision when the comparing step indicates that the correspondent node fails to belong to the set of trusted parties, wherein the prompting step comprises informing the user about the identity information.

7. A method according to claim 1, wherein the indicating step comprises indicating that the address update process comprises a binding update process according to a Mobile IP protocol.

8. A method according to claim 7, wherein the indicating step is performed in response to a predetermined event.

9. A method according to claim 8, wherein the indicating step comprises responding to the predetermined event comprising reception of a packet routed via a home agent of the mobile node.

10. A method according to claim 8, wherein the indicating step comprises responding to the predetermined event comprising reception of a new address for the mobile node.

11. A method according to claim 3, wherein the storing step comprises storing the security policy data comprising high-level identifiers of trusted correspondent nodes.

12. A method according to claim 3, wherein the storing step comprises storing the security policy data comprising rules for deciding whether the identity information represents a trusted correspondent node.

13. A method according to claim 1, wherein the authenticating step comprises authenticating the correspondent node by means of a certificate-based authentication protocol.

14. A method according to claim 13, wherein the authenticating step comprises authenticating by means of the certificate-based authentication protocol comprising an Internet Key Exchange protocol.

15. A method according to claim 13, wherein the authenticating step comprises authenticating by means of the certificate-based authentication protocol comprising a Transport Layer Security protocol.

16. A method according to claim 1, wherein the authenticating step comprises authenticating by means of the authenticating step comprising certifying the identity information cryptographically.

17. A mobile node for a communication system, the mobile node comprising:

indicator means for giving an indication when an address update process needs to be performed, location-related information about a mobile node being notified to a correspondent node of the mobile node if the address update process is performed;

authentication means for authenticating the correspondent node, the authentication means being responsive to the indicator means and yielding identity information about the correspondent node;

determination means, responsive to the authentication means, for determining whether the address update process is to be performed; and

address update means, responsive to the determination means, for carrying out the address update process.

18. A mobile node according to claim 17, further comprising binding means for maintaining a binding, the binding being an association of a home address of the mobile node with a care-of address of the mobile node,

wherein the correspondent node is informed of the binding when the address update process is performed.

19. A mobile node according to claim 17, wherein authentication means comprise a certificate-based authentication protocol.

20. A mobile node according to claim 17, wherein the authentication means comprise a Domain Name System-based protocol for obtaining the identity information.

21. A mobile node according to claim 17, wherein the determining means comprise a security policy database, the determination means being configured to determine, by means of the security policy database, whether the address update means can be activated without consulting a user of the mobile node.

22. A mobile node according to claim 21, wherein the determining means further comprise user interaction means for prompting the user to make a decision on whether the address update process is to be performed.

23. A mobile node according to claim 22, wherein the user interaction means are configured to indicate the identity information to the user, the identity information comprising a high-level identifier of the correspondent node.

24. A mobile node according to claim 21, wherein the security policy database comprises identifiers of trusted correspondent nodes.

25. A mobile node according to claim 21, wherein the security policy database comprises rules for determining whether a given identifier represents a trusted correspondent node.

26. A system for performing address updates in a communication system comprising:

indicator means for giving an indication when an address update process needs to be performed, location-related information about a mobile node being notified to a correspondent node of the mobile node if the address update process is performed;

authentication means for authenticating the correspondent node, the authentication means being responsive to the indicator means and yielding identity information about the correspondent node;

determination means, responsive to the authentication means, for determining whether the address update process is to be performed; and

address update means, responsive to the determination means, for carrying out the address update process.

27. A system according to claim 26, wherein the authentication means are located in the mobile node.

28. A system according to claim 26, wherein the authentication means are located in a home agent of the mobile node.

29. A system according to claim 26, wherein the address update means are located in a home agent of the mobile node.

30. A system according to claim 28, wherein the determination means are located in the home agent of the mobile node.